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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
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| 10/549,896 | 09/20/2005 | Benny Moonen | 118744-149 | 7140 |
| 29177 7590 04/15/2008 BELL, BOYD & LLOYD, LLP P.O. BOX 1135 CHICAGO, IL 60690 | | | EXAMINER HUSSAIN, IMAD | |
| | | | ART UNIT 2151 | PAPER NUMBER |
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

| | | | |
|------------------------------|--------------------------------------|--------------------------------------|--|
| Office Action Summary | Application No. 10/549,896 | Applicant(s) MOONEN, BENNY | |
| | Examiner IMAD HUSSAIN | Art Unit 2151 | |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 28 February 2008.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-10 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-10 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. The amendment filed on 28 February 2008 has been received and made of record.
2. Claims 1-10 are pending in application 10/549896.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims 1-3, 5 and 7 are rejected under 35 U.S.C. 102(b) as being clearly anticipated by W. R. Stevens ("TCP Timeout and Retransmission", listed on applicant's IDS, hereafter Stevens).

Regarding claim 1, Stevens discloses a method for transmitting a series of user data packets from a transmitter to a receiver using a TCP protocol, comprising:

transmitting, at the start of the user data transmission, a first number of user data packets from the series of user data packets to the receiver (Fig 21.2, segment 4; Fig 21.7, packets transmitted from the transmitter at points 48 and 50); transmitting, during transmission of a plurality of user data packets, the user data packets directly one after the other as the first number of user data packets, and not transmitting user data

packets to the receiver for a time period after transmitting the first number of user data packets (Fig 21.2, interval RTT #2; Fig 21.7, time between points 50 and 52);

transmitting a second number of user data packets from the series of user data packets to the receiver at a later time (Fig 21.2, segments 6 and 7; Fig 21.7, packets transmitted from the transmitter at points 52, 54 and 55); and

receiving a confirmation of receipt transmitted on receipt of the first number of user data packets from the receiver (Fig 21.2, segment 5) wherein the later time is defined such that it is before a time of receipt of the confirmation of receipt by the transmitter of the user data packets.

Regarding claim 2, Stevens discloses that the later time is defined such that the receiver receives the second number of user data packets (Fig 21.2, segments 6 and 7) after transmitting the confirmation of receipt (Fig 21.2, segment 5).

Regarding claim 3, Stevens discloses that the time period is a function of a time difference between transmission of a data packet by the transmitter and receipt of the data packet by the receiver (Section 21.4, Round-Trip Time Measurements, wherein round-trip time approximates twice the time difference between the transmission by the transmitter and receipt by the receiver).

Regarding claim 5, Stevens discloses that the user data packets are data from the internet (Section 21.4, paragraph 3).

Regarding claim 7, Stevens discloses that the second number (Fig 21.2, segments 6 and 7) of user data packets exceeds the first number (Fig 21.2, segment 4) of user data packets (see also Section 21.4, Slow Start, wherein the congestion window size starts small and is incremented for later transmissions).

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 4, 6 and 8-10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Stevens in further view of Karlsson et al (US 6,222,829 B1, hereafter Karlsson).

Regarding claim 4, Stevens does not explicitly disclose that the user data packets are transmitted by the transmitter to the receiver at least to some degree by radio.

Karlsson discloses that “data packets associated with the packet data service are carried across the mobile radio network using packet-switched communications on a packet channel. For example... using TCP/IP” (Karlsson, column 1, lines 24-35).

The claimed invention as a whole would have been obvious to one of ordinary skill in the art at the time the invention was made, given the teachings of Stevens on the matter of TCP transmissions (per claim 1) and the teachings of Karlsson for using TCP

over a radio network. One of ordinary skill in the art would recognize that the features of TCP transmissions are retained when the protocol is used over a radio network. One would be motivated to combine these features to allow for mobile communication, per Karlsson.

Regarding claim 6, Stevens does not explicitly disclose that the receiver is part of a mobile radio communication system, and the transmitter is a device connected both to the mobile radio communication system and another network using a TCP protocol.

Karlsson discloses that “packet data services are used to connect digital terminal equipment, such as a personal computer communicating through a mobile station operating in the mobile radio network, to an Internet Protocol (IP) communication network such as, for example, an Internet or an Intranet... For example, data packets can be carried on the packet channel using a Transmission Control Protocol/Internet Protocol (TCP/IP)” (Karlsson, column 1, lines 17-35, where the personal computer is the receiver and a node on the Internet is the transmitter).

The claimed invention as a whole would have been obvious to one of ordinary skill in the art at the time the invention was made, given the teachings of Stevens on the matter of TCP transmissions (per claim 1) and the teachings of Karlsson for using TCP over a radio network. One of ordinary skill in the art would recognize that the features of TCP transmissions are retained when the protocol is used over a radio network. One would be motivated to combine these features to allow for mobile communication, per Karlsson.

Regarding claim 8, the claim comprises the same limitations as those discussed in claims 1, 2, and 6. The same rationale of rejection is applicable.

Regarding claim 9, the claim comprises the same limitations as those discussed in claims 8 and 3. The same rationale of rejection is applicable.

Regarding claim 10, the claim comprises the same limitations as those discussed in claims 8 and 4. The same rationale of rejection is applicable.

Response to Arguments

7. Applicant's arguments filed 28 February 2008 have been fully considered but they are not persuasive.

Applicant states that Stevens does not disclose or render obvious all elements of claim 1, noting that claim 1 recites "transmitting a second number of user data packets from the series of user data packets to the receiver at a later time, and receiving a confirmation of receipt transmitted on receipt of a first number of user data packets from the receiver. Wherein the later time is defined such that it is before a time of receipt of the confirmation of receipt by the transmitter of the user data packets."

Applicant specifically argues that Stevens is limited to sending the second number of user data packets by a confirmation of receipt of one single previous packet instead of a plurality of previous packets.

Applicant further argues that Stevens' "numbers of packets" do not constitute "groups of packets" and that Stevens' messages transmitted while other messages are outstanding are from "a separate chain of transmitting packets and receiving acknowledgements."

8. In response to applicant's first argument, examiner notes that applicant appears to have taken a literal interpretation of cited diagram Figure 21.2 as a strict limit on Stevens' teachings. However, later figures clearly demonstrate that Stevens is not limited to having a maximum of three outstanding packets. For example, Figure 21.7 shows five outstanding packets. That the maximum appears to be three outstanding packets in Figure 21.2 is merely a function of the data points selected for clarity of presentation.

Figure 21.7 clearly shows *transmitting a second number of user data packets* (e.g., packets transmitted from the transmitter at points 52, 54 and 55) *from the series of user data packets to the receiver at a later time, and receiving a confirmation of receipt transmitted on receipt of a first number of user data packets* (e.g., packets transmitted from the transmitter at points 48 and 50) *from the receiver wherein the later time is defined such that it is before a time of receipt of the confirmation of receipt by the*

transmitter of the user data packets [the corresponding ACKs are not received until well after point 59].

9. In response to applicant's second argument, that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies (i.e., "groups" and "chains") are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993). Examiner further notes that there are inherent delays associated with data transmission and that data packets transmitted consecutively will therefore have such inherent delays between them.

Conclusion

10. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of

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the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to IMAD HUSSAIN whose telephone number is (571) 270-3628. The examiner can normally be reached on Monday through Friday from 0800 to 1700.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Follansbee can be reached on (571) 272-3964. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/IH/
Imad Hussain
Examiner

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/Salad Abdullahi/
Primary Examiner, Art Unit 2157